DOCUMENT RESUME

ED 223 919 CG 016 321

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TITLE Social Support and Depression among College Students.
PUB DATE Aug 82
NOTE 21p.; Paper presented at the Annual Convention of the American Psychological Association (90th, Washington, DC, August 23-27, 1982).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Attribution Theory; *College Freshmen; *Depression (Psychology); *Friendship; Higher Education; *Loneliness; Longitudinal Studies; Peer Relationship; *Social Isolation; Stress Variables; *Student Adjustment; Student Characteristics
IDENTIFIERS *Life Events

ABSTRACT

Entrance into college is considered a stressful experience, with many students experiencing depression and maladjustment. A longitudinal study was conducted to investigate three major models of depression among college students, i.e., the life events model, the cognitive-attributional model, and the social support model. Subjects were 134 freshmen who were questioned at the beginning of their first semester and again 6 weeks later. Results indicated that the variables most strongly and consistently associated with depression were loneliness, interpersonal mistrust, and neuroticism. Data suggested that interpersonal mistrust and neuroticism were related to depression through the variable of loneliness and that loneliness also "caused" interpersonal mistrust and neuroticism. The findings suggest that loneliness is an important cause of depression among college students. (Author/JAC)

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ED223919

Paper presented at the annual meeting of the American Psychological Association, Washington, D.C., 1982.

Social Support and Depression Among College Students

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Running Head: Social Support

Social Support and Depression Among College Students

Entrance into college is considered a stressful experience by most individuals. The freshman year, in particular, is considered a period of high change and stress, with many students experiencing depression and maladjustment (Knapp & Magee, 1979; Masuda, Note 1). Yet, as Warheit (1979) questioned: Why have some individuals who become depressed experience relatively low levels of stressful life events, while others who have experienced many stressful events failed to become depressed. Three research models have attempted to address this issue.

One model of depression is based on the stress of life change; particularly that negative life events create enough stress to cause depression. The link between the stress of life events and depression has been established by several researchers (Andrews, Tennant, Hewson & Vaillant, 1978; Beck & Worthen, 1972; Brown, Harris, & Peto, 1973; Paykel, 1974; Paykel, Myers, Dienelt, Klerman, Lindenthal, & Pepper (1969); Warheit, 1979). The results of these studies indicated that undesirable events, especially exits and losses from the social field, were particularly important distinquishers of depressed individuals from control subjects. Depression may, therefore, be related to the amount of life change produced by events related to entering college.

A second model of depression involves social support factors. While environmental stressors may play an important role in depression, social support is viewed as an important buffering agent between these stressors and depression. Researchers (Henderson, Byrne, Duncan-Jones, Adcock, Scott, & Steele, 1978; Holahan & Moos, 1981; Lin Ensel, Simeone, & Kuo, 1979) have demonstrated that an inverse relationship clearly exits between social support and psychological maladjustment. Others (e.g., Brown, 1979; Forrest, Fraser, & Priest, 1965; Lowenthal & Havens, 1968; Nuckolls, Cassel, & Kaplan, 1972; Warheit, 1979) have shown that, in the presence of stressful life events, social support has positive effects on an individual's physical, emotional, and psychological adjustment.

A third model of depression suggests that one's appraisal of stressful situations rather than the situations themselves have important etiological implications for depression. Using an attributional approach, Abramson, Seligman, and Teasdale (1978) hypothesized that people who are disposed to make internal, stable, and global attributions about the causes of negative life events and external, unstable, and specific attributions about the causes of positive life events are prone to depression and chronic feelings of helplessness. Support for the relationship between attributional style and depression in college students was found in correlational study by Seligmen, Abramson, Semmel, and Von Baeyer (1979), and evidence that attributional style may play a causative role in depression received partial support in a cross-lagged panel correlation study reported by Golin, Sweeney, and Shaeffer (1981).

The present study used a correlational design to test the relationship between the above-mentioned variables and depression in a college student population. College freshmen were administered self-report measures of depression, life events, social support, and attributional style at the beginning of their first semester at college and again six weeks later. It was hypothesized that within a multivariate statistical model, the variables of life events, social support, and attributional style would predict depression scores at both Time 1 and Time 2. In addition, a cross-lagged panel correlation design was employed to establish temporal precedence between each variable and depression.

The cross-lagged panel correlation analysis is a procedure for testing assumptions about casuality from correlational data (Kenny, 1975; 1979). In this procedure (Figure 1), measures of two variables are obtained at two different points in time to yield two autocorrelations (rA_1A_2 and rB_1B_2), two synchronous correlations (rA_1B_1 and rA_2B_2), and two cross-lagged correlations (rA_1B_2 and rA_2B_1). When assumptions of stability,

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Insert Figure 1 about here

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synchronicity, and stationarity are met, the cross-lagged analysis is a test of spuriousness (Kenny, 1975). That is, whether the relationship between two variables is due to the

causal effects of either variable or from the effects of some third variable. If an explanation in terms of spuriousness can be rejected, then the cross-lagged differential (rA_1B_2 minus rA_2B_1) which shows that rA_1B_2 is greater than rA_2B_1 would suggest that variable A might be the cause of variable B; a finding in the opposite direction would suggest that B is the cause of A (Golin et al, 1981).

Method

Subjects

The participants were 134 first-semester freshmen who were conscripted from the general psychology subject pool at an Eastern university. Each subject was given a packet of testing instruments that took approximately 45 minutes to complete. They were called and asked to report to the Psychology Testing Center. Upon arrival they were given a packet of self-report measures described below and a cover sheet explaining the testing procedure. All subjects were tested on the same day for each of the testing sessions.

Instruments

The level of depression at Time 1 and Time 2 was assessed using the Self-Rating of Depresson Scale (Zung, 1973). Two measures of life stress were obtained at each session through a questionnaire developed by Rich and Scovel (Note 2) from previous measures of life events with college students. The questionnaire was revised to measure the total number of negative life changes experienced within a six-week period and a

subjective estimate (0-100) of the amount of stress and coping required for each event.

Social support was evaluated with three measures that included the UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978) to measure the perceived quality of social support; the Traditional Social Support Index (TSSI) (Holahan & Moos, 1981) to measure the quantity of social support; and the Suspicion and Mistrust Scale (Tyron, Stein, & Chi, 1977) to measure the extent of interpersonal mistrust which appears to be correlated with depression and loneliness (Brennan, 1979; Weiss, 1973).

Attributional style was assessed with the Attributional Style Questionnaire (Rich and Scovel, Note 3). The instrument evaluated the individual's tendency to attribute reasons for failure to internal or external, stable or unstable, and global or specific causes. Subjects indicated on seven-point scales the extent to which each of the above attributional dimensions contributed to failure in four hypothetical social and four hypothetical academic situations. Also included in the packet of materials was the Willoughby Questionnaire for Self-Administration (Wolpe, 1973). This was considered to be a measure of neuroticism. That is, the tendency to evaluate everyday situations as threatening or anxiety inducing.

Results

The data collected in this experiment were analyzed separately for Time 1 and Time 2 using multiple regression

analyses, stepwise forward-inclusion algorithm. The results of the regression analysis for each time period are presented in Table 1. As can be seen, the variables most strongly and consistently predictive of depression at both time periods were neuroticism, loneliness, and interpersonal mistrust. These three variables accounted for 48 percent of the variation in the depression scores at Time 1 and 59 percent of the variation at Time 2.

Insert Table 1 about here

A cross-lagged panel correlation analysis (Kenny, 1975) was conducted to determine temporal precedence between each life event, social support, and cognitive variable and depression. The autocorrelations were all positive and moderately high (r's= .42 - .79), meeting the basic assumption of stability of measures. The synchronous correlations ranged from .05 to 70. Two variables, the total number of negative life events and the internality of attributions, were not significantly related to depression, and, hence, were omitted from the cross-lagged analysis. Further, the Pearson-Filon Test of the differences between synchronous correlations revealed two significant results; both the stability of attributions and the internality of attributions proved unreliable in their relationship to depression. Therefore, the cross-lagged correlations were

examined assuming quasi-stationarity rather than perfect stationarity (Kenny, 1975).

The results of the cross-lagged panel correlation analysis between each of the nine remaining variables (excluding total negative life stress and internality of attributions) yielded one significant result. Using the Pearson-Filon test, the cross-lagged correlation between loneliness and depression was significant at the p. =.01 level. Because the correlation between loneliness at Time 1 and depression at Time 2 was significantly greater than that of depression at Time 1 and loneliness at Time 2, it is probable that loneliness causes depression or that it has temporal precedence to depression.

As detailed above, the variables of loneliness, neuroticism, and interpersonal mistrust were all significantly predictive of depression. For clarification, these interrelationships were examined with the cross-lagged panel analysis. The results are presented in Table 2. As can be seen, the results suggest that the relationship between

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Insert Table 2 about here

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neuroticism and depression and interpersonal mistrust and depression appears to occur through the third variable of loneliness. Loneliness had temporal precedence to both neuroticism ($p < .05$) and interpersonal mistrust ($p < .01$) in

addition to depression. However temporal precedence could not be established between neuroticism and interpersonal mistrust, and between each of those variables and depression.

Discussion

The results of the present experiment suggest that loneliness is an important cause of depression among college students. It was significantly more predictive of depression than measures of life change and attributional style. Moreover, the number of social attachments was not consistently related to depression. Rather, the loneliness experience or the nature of the relationships appears to have the most important causative influence in depression.

Other researchers, using other methods of analysis (Brown, 1979; Lowenthal & Haven, 1968; Paykel, 1979) and different terminology to refer to the quality of social support (i.e., intimacy, confiding relationships, etc.) have found significant effects for the role of the quality of social support and its relationship to depression. These researchers have concluded that the maintenance of a stable, intimate (high quality) relationship is more closely associated with good emotional and psychological adjustment than is high social interaction or role status.

Using a multiple regression statistical model the variables most predictive of depression in college students were, in addition to loneliness, those of neuroticism and interpersonal mistrust. These three variables accounted for approximately

50-60 percent of the variation in depression scores. However, the cross-lagged analysis suggested that the relationship between neuroticism and depression and interpersonal mistrust and depression was through the variable of loneliness. Loneliness had temporal precedence to both neuroticism and interpersonal mistrust. Silver and Wortman (1980) suggest that social support may be helpful in stressful situations to the extent that an individual becomes part of a system of mutual obligation and reciprocal validation. Feelings of being cared about and the validation of one's feelings, beliefs, and interpretations may lead to greater self-confidence and self-esteem (Silver and Wortman, 1980). Loneliness, on the other hand, and the interpersonal mistrust associated with it, may inhibit self-disclosure and intimacy so that catastrophic ideas and feelings cannot be invalidated and acceptance of self by others cannot be experienced. Instead, the increasing isolation, feelings of differentness, and worthlessness that typify depression may result.

The major limitations of the present study concern the use of a small sample size. Kenny (1975) recommends at least 200-300 subjects in order to adequately obtain reliable communality ratios and to provide sufficient power to test the cross-lagged differences. Large differences between one cross-lagged correlations and another are required (i.e., .15) to detect statistically significant effects with the Pearson - Filon test. Additionally, the lack of relationship between the measures of attributional style and depression may mean that

attributional style did not get a fair test in the present study as others (Seligman et al, 1979) did find a significant relationship between the two variables.

Reference Notes

1. Masuda, M. Life Event Frequencies, Perceptions, and Life Style. Paper presented at meeting of American Psychosomatic Society, Pittsburgh, March 28, 1976.

2. Rich, A., & Scovel, M., The Negative Life Events Scale for College Students. Unpublished manuscript., I.U.P., 1981.

3. Rich, A., & Scovel, M., Attributional Style Questionnaire for Social and Academic Failure Situations. Unpublished paper, I.U.P., 1981.

References

Abramson, L. Y., Seligman, M.E.D. & Teasdale, J.D. Learned helplessness in humans: critique and reformulation. Journal of Abnormal Psychology, 1978, 87, 49-74.

Andrews, G., Tennant, C., Hewson, D. M., & Vaillant, G. E. Life events stress, social support, coping style, and the risk of psychological impairment. Journal of Nervous and Mental Disease, 1978, 166, 307-316.

Beck, J. C., & Worthen, K. Precipitating stress, crisis theory, and hospitalization in schizophrenia and depression. Archives of General Psychiatry, 1972, 26, 123-129.

Brown, G. W. The social etiology of depression-London studies. in The Psychobiology of the Depressive Disorders: Implications for the Effects of Stress. Academic Press, 1979.

Brown, G. W., Harris, T.O., & Peto, J. Life events and psychiatric disorder: 2. Nature of causal link. Psychological Medicine, 1973, 3, 159-176.

Forrest, A. D., Fraser, R. H., & Priest, R. G. Environmental factors in depressive illness. British Journal of Psychiatry, 1965, 111, 243-253.

Golin, S., Sweeney, P.D., & Shaeffer, D.E. The causality of causal attributions in depression: A cross-lagged panel correlational analysis. Journal of Abnormal Psychology, 1981, 1, 14-22.

Henderson, S., Byrne, D. G., Duncan-Jones, P., Adcock. S., Scott, R., & Steele, G. P. Social bonds in the epidemiology of neurosis: A preliminary communication. British Journal of Psychiatry, 1978, 132, 463-466.

Holahan, C. J., & Moos, R.H. Social support and psychological distress: A longitudinal analysis. Journal of Abnormal Psychology, 1981 90(4), 365-370.

Knapp, S. J., & Magee. R. The relationship of life events to grade point average in college students. Journal of College Student Personnel, 1979, 20, 497-502.

Kenny, D. A. Cross-lagged panel correlation: A test for spuriousness. Psychological Bulletin, 1975, 82(6), 887-903.

Kenny, D. A., & Harackiewicz, J. M. Cross-lagged panel correlation: Practice and promise. Journal of Applied Psychology, 1979, 64(4), 372-379.

Lin, L., Simeone, R. S., Ensel. W. M., and Kuo, W. Social support, stressful life events, and illness: A model and en empirical test. Journal of Health and Social Behavior, 1979, 20, 108-119.

Lowenthal, M., & Haven, C. Interaction and adaptation: Intimacy as a critical variable. American Sociological Review, 1968, 33, 20-30.

Nuckolls, K. B., Cassel, J., & Kaplan, B. H. Psychological assets, life crisis, and prognosis of pregnancy. American Journal of Epidemiology, 95(5), 431-441.

Paykel, E. S. Recent life events and clinical depression. In E.K.E. Gundeson & R. H. Rahe (Eds.), Life Stress and Illness, St Louis: Thomas, 1974.

Paykel, E. S., Myers, J. K., Dienelt, M. N., Kierman, G. L., Lindenthal, J. J., & Pepper, M. P. Life events and depression: A controlled study. Archives of General Psychiatry, 1969, 21, 753-760.

Russell, D., Replau, L. A., & Ferguson, M. L. Developing a measure of loneliness. Journal of Personality Assessment, 1978, 42(3), 290-293.

Seligman, M. E., Abramson, L. Y., Semmel, A., & VonBaeyer, C. Depressive attributional style. Journal of Abnormal Psychology, 1979, 88, 242-247.

Silver, R. L., & Wortman, C. B. Coping with undesirable life events. in Human Helplessness, Academic Press, 1980.

Tryon, Stein, & Chee. The MM PI: A practical guide. (ed/J. R. Graham), New York: Oxford University Press, 1977.

Warheit, G. J. Life events, coping, stress, and depressive symptomology. American Journal of Psychiatry, 1979, 136(4-B), 502-507.

Wolpe, J. The practice of behavior therapy (2nd ed.), New York: Pergamon Press, 1973.

Zung, W. From art to science: The diagnosis and treatment of depression. Archives of General Psychiatry, 1973, 29(3), 328-337.

Footnote

Requests for reprints and an extended report of this study, including the life events and attributional measures should be sent to Alexander R. Rich, Department of Psychology, IUP, Indiana, PA 15705.

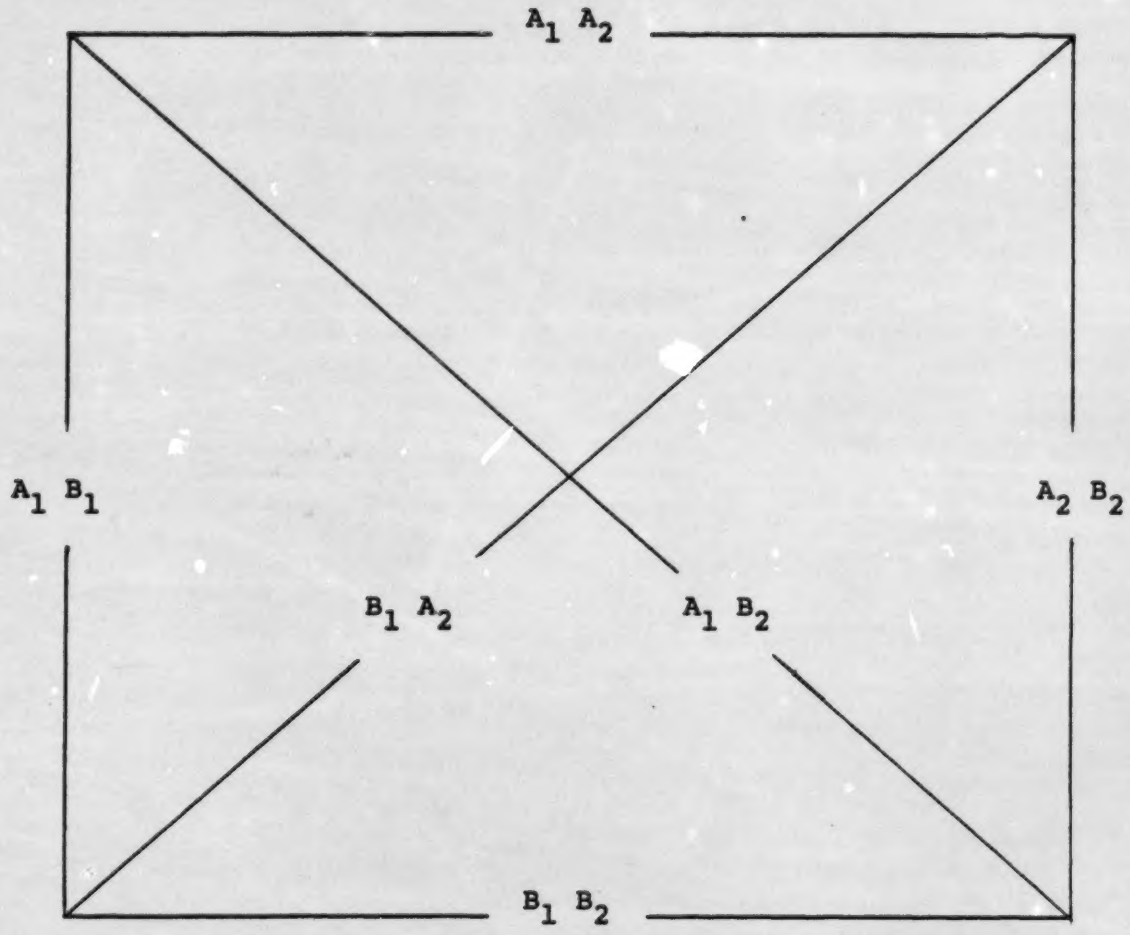

Figure 1. The basic cross-lagged panel correlation design.

Table 1. Predictors of Depression in College Students: Time 1 and Time 2 Stepwise Multiple Regression Analyses.

Variables	R	Increase in R^2	F to enter	F in final
Time 1				
Neuroticism	.62	.39	83.05	83.05*
Loneliness	.66	.05	51.35	12.44*
I-P Mistrust	.69	.04	39.24	8.86*
Stability	.70	.02	31.32	4.45*
Subj. Stress	.71	.01	25.69	2.09
Time 2				
Neuroticism	.71	.50	133.61	133.61*
Loneliness	.76	.07	87.49	21.07*
I-P Mistrust	.77	.02	63.65	7.41*
Globality	.78	.01	49.20	2.96*
TSSI	.78	.01	40.51	2.87*

*$F(5/128)$, $p < .01$.

Table 2 Pearson-Filon Comparisons of Cross-Lagged Correlations Between Depression, Loneliness, Interpersonal Mistrust, and Neuroticism.

Variable	rA_1B_2	rA_2B_1	z	p
Depression(A)				
Neuroticism(B)	.64	.54	-1.69	
Loneliness(B)	.38	.61	3.39	.01
Interpersonal Mistrust(B)	.41	.34	- .83	
Neuroticism(A)				
Loneliness(B)	.37	.51	2.02	.05
Interpersonal Mistrust(B)	.38	.33	- .59	
Loneliness(A)				
Interpersonal Mistrust(B)	.51	.20	3.83	.01

Note: rA_1B_2 is the correlation between variable A at Time 1 and the B variables at Time 2. rA_2B_1 is the correlation between variable A at Time 2 and the B variables at Time 1.

	Time 1			Time 2		
Variables	Mean	S.D.	Range	Mean	S.D.	Range
Depression	35.88	7.53	20.-56.	35.38	7.99	22.-68.
No neg. events	5.34	2.29	1.-12.	5.18	2.02	0-11.
Neg. stress	244.92	172.94	0-940.	238.54	158.03	0-740.
SMDS (stress/event)	46.78	24.00	0-142.	45.79	26.68	0-160.
Loneliness	38.99	11.60	20.-68.	38.58	13.06	20.-71.
Suspicousness	10.87	4.58	1.-32.	10.15	4.60	0-22.
TSSI	55.90	31.63	0-215.	55.74	34.16	10.-223.
Locus of control	4.69	.81	2.25-7.00	4.60	.90	1.50-6.50
Stability	3.82	1.01	1.50-5.75	3.68	.90	1.75-6.00
Globality	3.87	1.16	1.00-6.75	4.04	1.12	2.00-7.00
Anxiety	33.04	12.58	5.-67.	33.09	14.85	1.-81.

Table 1. Means, Standard Deviations, and Ranges: Time 1 and Time 2.